REMARKS

Applicants appreciate the continued thorough examination of the present application that is reflected in the non-final Official Action of May 20, 2005. Applicants also appreciate the Examiner's withdrawal of all of the earlier rejections in view of Applicants' earlier Amendment. Independent Claims 1, 32 and 34 have now been amended to more clearly define the patentable distinctions over the newly cited Terretta et al. reference (U.S. Published Patent Application US 2001/0027491 A1). Applicants respectfully submit that all the pending claims are patentable for the reasons that now will be described.

Claim 35 Is Statutory

Claim 35 was rejected under 35 USC §101 as being directed to non-statutory subject matter. However, Applicants respectfully submit that Claim 35 is a dependent claim that depends from Claim 34. It follows that, if Claim 34 is directed to statutory subject matter, then Claim 35 also is directed to statutory subject matter. Moreover, independent Claim 34 recites:

> A computer program product for efficiently serving content using a network-attached storage ("NAS") system having a plurality of disk drives, the computer program product embodied on one or more computer-usable media....

Applicants respectfully submit that computer-readable program code embodied in computer-usable media is clearly statutory subject matter pursuant to MPEP §2106.02. More specifically, as noted at MPEP Page 2100-13:

> Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions. (Emphasis added.)

For at least these reasons, Claim 35 is statutory, and Applicants respectfully request withdrawal of the rejection under 35 USC §101.

Independent Claims 1, 32 and 34 Are Patentable Over Terretta et al.

Independent Claim 1 has been amended to recite:

> 1. A method of efficiently serving content in a distributed computing environment that comprises a network-attached storage system having a plurality of disk drives, comprising:
>
> receiving usage metrics for a particular stored object; and
>
> evaluating the received usage metrics to determine whether the particular stored object is stored in an appropriate one of the plurality of disk drives, and moving the object to another of the plurality of disk drives if not. (Emphasis added.)

Support for the above-underlined amendments may be found, for example, at Page 28, line 12-Page 29, line 8 of the present application. Remaining independent Claims 32 and 34 are system and computer program product analogs of independent Claim 1. They have been amended similarly and will not be analyzed separately.

These amendments have been made to clarify that embodiments of the invention include a network-attached storage system having a plurality of disk drives. Moreover, in response to usage metrics, evaluation is made as to whether a particular stored object is stored in an appropriate one of the plurality of disk drives, and the object is moved to another one of the plurality of disk drives if not. In sharp contrast, Terretta et al. relates to movement among levels of media file storage. See, for example, Terretta et al., Paragraph 24:

> A popularity engine is generally included as part of the metaswitch, the popularity engine tracking user requests for media files that are stored within the media storage and issuing commands to reposition the media files based upon the tracking information. A file mover is provided that responds to commands from the popularity engine and repositions media files within media storage levels. The stream redirector within the metaswitch thus advantageously redirects a user to an appropriate level of media file storage. The redirection of the user is generally based on input from the content collection and the server collection. (Emphasis added.)

Also, see Terretta et al. Paragraph [0080], which was cited by the Official Action at the top of Page 3:

> Popularity engine **510** interacts with content collection **504** and file mover **514** within metaswitch **500**. As a particular media file registers "hits" from users and surpasses a predetermined threshold level, e.g., every ten hits, popularity engine **510** issues a command to file mover **514** to move the media file to a more readily accessible storage level, e.g., from network attached storage to the hard drive, or from the hard drive to RAM, or from network attached storage to RAM. Thus, as media files become more commonly requested, metaswitch **500** automatically notes the increased relative popularity of such media file and moves such file (e.g., through a DFS copy command) into more readily accessed storage locations. File mover **514** thus responds to command(s) from popularity engine **510** to copy media file(s) into desired memory storage locations. (Emphasis added.)

Accordingly, Terretta et al. appears to describe a "vertical" movement among different levels of storage depending on popularity. In sharp contrast, amended Claim 1 recites a "horizontal" movement among equivalent ones of a plurality of disk drives based on popularity. As noted in the present application, for example at Page 28, line 20-Page 29, line 5:

> Therefore, when the present invention is used to place content optimally on the devices of a NAS, the placement decision comprises determining where on the NAS resources the files for popular objects should be stored. It may be desirable to place these files around the outside sectors of the NAS, for example. Furthermore, it may be desirable to spread the files for the most popular objects evenly across the NAS devices, such that accesses to the physical disks are balanced.

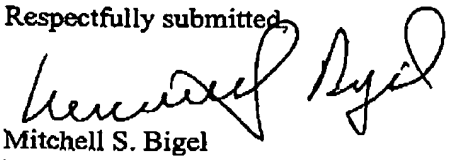
For at least these reasons, independent Claims 1, 32 and 34 are patentable over Terretta et al. The dependent claims are patentable at least per the patentability of the independent claims from which they depend. In view of this clear patentability, the dependent claims will not be analyzed separately.

Conclusion

Applicants again appreciate the Examiner's thorough analysis, the withdrawal of all of the earlier rejections and the new citation of Terretta et al. Applicants have now shown that Applicants' movement of objects among a plurality of disk drives of a network-detached storage system is patentable over Terretta et al.'s movement among

media storage levels. Accordingly, all of the pending claims are now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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